Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1.   (Currently amended) An apparatus for handwritten character font generation comprising:

a character image extraction section configured to extract character image data of <u>a</u> handwritten <u>character</u> ~~characters~~ filled into <u>a</u> character entry <u>box</u> ~~boxes~~ from image data scanned from a character entry sheet in which the handwritten ~~characters are~~ <u>character is</u> filled into the character entry boxes corresponding to respective character codes;

a character positional information storage section configured to store character positional information of font character space <u>which indicates an area being allowed to be occupied by a character and</u> defined for each of characters;

a character positional information calculation section configured to calculate the amount of movement for moving the extracted character image data to a character position of the font character space defined in the character positional information;

a character position alignment section configured to move the character image data to the character position of the font character space defined in the character positional information, based on the calculated amount of movement; and

a character font generation section configured to generate font characters of the handwritten character font based on the moved character image data.

2.   (Original) The apparatus of claim 1, further comprising a character circumscribed quadrilateral calculation section configured to calculate a circumscribed quadrilateral of a character portion of the character image data from the extracted character image data, wherein:

the character positional information calculation section calculates the amount of

movement for moving the calculated circumscribed quadrilateral to the character position of the

font character space defined in the character positional information; and

the character position alignment section moves the character image data to the character

position of the font character space defined in the character positional information by moving the

character portion of the character image data based on the calculated amount of movement.

3.   (Original) The apparatus of claim 2, wherein the character positional information includes

information about a ratio of a top blank to a bottom blank and a ratio of a left blank to a right

blank of the circumscribed quadrilateral in the font character space.

4.   (Original) The apparatus of claim 1, wherein the character positional information includes

information which defines position fiducial characters corresponding to each of specific characters

and information which defines a positional relation between each of the specific characters and

each of the position fiducial characters respectively.

5.   (Original) The apparatus of claim 2, wherein the character positional information includes

information which defines position fiducial characters corresponding to each of specific characters

and information which defines a positional relation between each of the specific characters and

each of the position fiducial characters respectively.

6.   (Original) The apparatus of claim 3, wherein the character positional information includes

information which defines position fiducial characters corresponding to each of specific characters

and information which defines a positional relation between each of the specific characters and each of the position fiducial characters respectively.

7.   (Original) The apparatus of claim 4, wherein the specific characters includes voiced sound characters among Hiragana characters and Katakana characters, p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of a lower-case character.

8.   (Original) The apparatus of claim 5, wherein the specific characters includes voiced sound characters among Hiragana characters and Katakana characters, p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of a lower-case character.

9.   (Original) The apparatus of claim 6, wherein the specific characters includes voiced sound characters among Hiragana characters and Katakana characters, p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of a lower-case character.

10.   (Currently amended) A computer readable storage medium recording a program for handwritten character font generation, the program executing in a handwritten character font generation apparatus, the program comprising:

extracting character image data of a handwritten character ~~characters~~ filled into a character entry box ~~boxes~~ from image data scanned from a character entry sheet in which the handwritten character is ~~characters are~~ filled into the character entry box ~~boxes~~ corresponding to respective character codes;

calculating the amount of movement for moving the extracted character image data to a

character position of font character space <u>which indicates an area being allowed to be occupied by</u> <u>a character</u> defined in character positional information;

moving the character image data to the character position of the font character space defined in the character positional information based on the calculated amount of movement; and

generating font characters of the handwritten character font based on the moved character image data.

11. (Original) The computer readable storage medium of claim 10 wherein the program further comprising

calculating a circumscribed quadrilateral of a character portion of the character image data from the extracted character image data, wherein:

the amount of movement for moving the calculated circumscribed quadrilateral to the character position of the font character space defined in the character positional information is calculated; and

the character image data to the character position of the font character space defined in the character positional information by moving the character portion of the character image data is moved based on the calculated amount of movement.

12. (Original) The computer readable storage medium of claim 11 wherein the character positional information includes information about a ratio of a top blank to a bottom blank and a ratio of a left blank to a right blank of the circumscribed quadrilateral in the font character space.

13. (Original) The computer readable storage medium of claim 10 wherein the character

positional information includes information which defines position fiducial characters

corresponding to each of specific characters and information which defines a positional relation

between each of the specific characters and each of the position fiducial characters respectively.

14.   (Original) The computer readable storage medium of claim 11 wherein the character

positional information includes information which defines position fiducial characters

corresponding to each of specific characters and information which defines a positional relation

between each of the specific characters and each of the position fiducial characters respectively.

15.   (Original) The computer readable storage medium of claim 12 wherein the character

positional information includes information which defines position fiducial characters

corresponding to each of specific characters and information which defines a positional relation

between each of the specific characters and each of the position fiducial characters respectively.

16.   (Original) The computer readable storage medium of claim 13 wherein the specific

characters includes voiced sound characters among Hiragana characters and Katakana characters,

p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of

a lower-case character.

17.   (Original) The computer readable storage medium of claim 14 wherein the specific

characters includes voiced sound characters among Hiragana characters and Katakana characters,

p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of

a lower-case character.

18.   (Original) The computer readable storage medium of claim 15 wherein the specific

characters includes voiced sound characters among Hiragana characters and Katakana characters,

p-sound characters among Hiragana characters and Katakana characters, and Roman numerals of

a lower-case character.

19.   (Currently amended) A method for handwritten character font generation in an apparatus

for handwritten character font generation, the method comprising:

extracting character image data of a handwritten character ~~characters~~ filled into a

character entry box ~~boxes~~ from image data scanned from a character entry sheet in which the

handwritten character is ~~characters are~~ filled into the character entry boxes corresponding to

respective character codes;

calculating the amount of movement for moving the extracted character image data to a

character position of font character space which indicates an area being allowed to be occupied by

a character and defined in character positional information;

moving the character image data to the character position of the font character space

defined in the character positional information based on the calculated amount of movement; and

generating font characters of the handwritten character font based on the moved character

image data.

20.   (Original) The method of claim 19, further comprising calculating a circumscribed

quadrilateral of a character portion of the character image data from the extracted character image

data, wherein: the amount of movement for moving the calculated circumscribed quadrilateral to

the character position of the font character space defined in the character positional information is

calculated; and the character image data to the character position of the font character space

defined in the character positional information by moving the character portion of the character

image data is moved based on the calculated amount of movement.

21.   (New) The apparatus of claim 1, wherein

the character positional information storage section is configured to store the character positional

information of a positional fiducial character including an ordinary character defined for each

positional fiducial character,

the character positional information calculation section is configured to define the character

positional information of a specific character including the positional fiducial character based on the

character positional information of the positional fiducial character when the handwritten character

corresponding to character image data extracted by the character image exstraction section is the

specific character, and is configured to calculate the amount of movement for moving the extracted

character image data of the specific character to a character position in the font character space

defined in the character positional information of the specific character based on the character

positional information of the specific character.

22.   (New) The method of claim 19, wherein

the character positional information storage section is configured to store the character

positional information of a positional fiducial character including an ordinary character defined for

each positional fiducial character,

the calculating step further comprising:

defining the character positional information of a specific character including the positional fiducial character based on the character positional information of the positional fiducial character the handwritten character corresponding to character image data extracted by the character image extraction section is the specific character, and

calculating the amount of movement for moving the extracted character image data of the specific character to a character position in the font character space defined in the character positional information of the specific character based on the character positional information of the specific character.

23.　(New) The computer readable storage medium of claim 10, wherein the program further comprises

a character positional information storage section which is configured to store the character positional information of a positional fiducial character including an ordinary character defined for each positional fiducial character,

and wherein the character positional information calculation section is configured to define the character positional information of a specific character including the positional fiducial character based on the character positional information of the positional fiducial character when the handwritten character corresponding to character image data extracted by the character image extraction section is the specific character, and is configured to calculate the amount of movement for moving the extracted character image data of the specific character to a character position in the font character space defined in the character positional information of the specific character based on the character positional information of the specific character.